

Reallocation and Productivity Growth: The FAQs

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Abstract

In this paper we assess the role of reallocation of resources -- through shifts in market shares among incumbents as well as through firm entry and exit -- to productivity. We are motivated by the evidence in all countries studied of heterogeneity of firms and substantial mobility of factors of production across firms in each market. However, recent studies have raised questions about the theoretical underpinnings of the connection between reallocation and productivity (e.g. Levinsohn and Petrin, 2005). Indeed, following Hulten (1978), it can be shown that under the hypotheses of continuous differentiability of the social production possibilities frontier and marginal rates of transformation reflecting the ratio of marginal products of resources of the various producers at all times, instantaneous aggregate productivity growth reflects only within-firm growth. We show that these assumptions rule out a meaningful role for reallocation and within sector dispersion of productivity. Both of the latter arise in models where frictions in product or factor markets yield departures from these assumptions.

Using a harmonized firm-level database covering 24 industrial, transition and developing countries, we look at the magnitude and characteristics of firm heterogeneity and reallocation. First, we observe large churning of firms in all sectors, countries and years. New firms tend to be significantly different from the average incumbents and experience different growth patterns if they survive the market selection. Further, we find evidence of a wide distribution of firm-level productivity, even among producers of homogeneous goods, which is *prima facie* evidence that frictions are preventing resources from being instantaneously allocated to their best use.

There are considerable policy implications of this heterogeneity of productivity and the importance of reallocation of resources. The breakdown of the assumptions used by Hulten point towards information costs and transactions costs. Adjustment of the economy to changes in supply conditions are costly and take time in economies subject to frictions. Further, policy may affect the costs of various paths of reallocation as well. The paper is organized as a list of questions and answers concerning reallocation and productivity growth. For each question, some theoretical considerations are provided, followed by empirical evidence obtained from harmonized firm-level data. In analysing the data, we frequently use a difference in difference approach, exploiting the sectoral and size dimensions of the data. Further, major shocks and policy reforms during the transition to a market economy in Central and Eastern European countries allows us to assess the role of market forces in driving changes in allocation of resources and ultimately in productivity.

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